



Product Data Sheet

EHD FASTENERS AND RHINOBOND® PLATES

PRODUCT DESCRIPTION

Mule-Hide EHD Fasteners are used with Carlisle TPO or PVC RhinoBond Induction Welding Plates to secure Mule-Hide TPO and PVC roofing membranes. EHD Fasteners may be used on 22-gauge (0.76 mm) to 18-gauge (0.81 mm) steel or wood decks (minimum 15/32" [12 mm] CDX plywood). The fastener is designed to offer optimum driving performance, back-out and corrosion resistance with excellent pullout values. The Carlisle RhinoBond TPO or PVC Induction Welding Plates are designed to attach the roofing membrane from the underside using the RhinoBond induction-welding tool.



Mule-Hide EHD Fasteners

Typical Properties and Characteristics			
Screw Length*	Weight /Box	Thread Length	Packaging Fasteners/Box.
1-1/4"	12.6 lbs.	1-1/4"	1,000
2"	19.5 lbs.	2"	1,000
3"	28.2 lbs.	3"	1,000
4"	37.8 lbs.	3"	1,000
5"	48.1 lbs.	4"	1,000
6"	27.9 lbs.	4"	500
7"	33.6 lbs.	4"	500
8"	37.3 lbs.	4"	500
9"	20.7 lbs.	4"	250
10"	23.7 lbs.	4"	250
Carlisle RhinoBond Induction Welding Plates			
3 1/8 (80)	36 lbs (16.0)	N/A	500

* Additional Fastener lengths are available up to 24 inches. Contact Mule-Hide for availability.

Average Ultimate Pullout Values in Corrugated Steel Deck Substrates														
Thickness	24 ga.			22 ga.			20 ga.			18 ga.			16 ga.	
Strength, ksi	36.5	33.0	80.0	102.0	33.0	80.0	102.0	33.0	80.0	102.0	33.0	80.0	102.0	
Pullout (lbs)	390	465	695	805	605	855	970	925	1125	1215	1175	1370	1460	

Average Ultimate Pullout Values in Wood Substrates								
Type	APA Rated OSB				APA Rated Plywood			
Thickness	7/16"	15/32"	19/32"	23/32"	15/32"	19/32"	23/32"	SPF #2
Pullout (lbs)	295	300	310	515	400	525	685	1165*

BENEFITS & SUPPLEMENTAL STATEMENTS

- Reduces the number of fasteners and plates compared to conventional mechanically attached applications
- No perimeter sheets required
- Faster dry-in time
- Non-penetrating system
- Even load-distribution across membrane

Product Data Sheet

EHD FASTENERS AND RHINOBOND PLATES

INSTALLATION INSTRUCTIONS

No pre-drilling is necessary for wood and steel decks. Simply insert the EHD fastener through the RhinoBond plate and install with a standard clutch drive electric screw gun (0-2500 rpm). Optimum fastener performance is achieved when the fastener is installed perpendicular to the deck and into the top flutes of a steel deck. Follow the Mule-Hide RhinoBond System installation instructions to attach the membrane to the installed plate using the RhinoBond portable induction tool.

Keep insulation substrate and membrane clean. Any debris on the top of the insulation substrate and/or the membrane should be removed prior to initiating the induction welding process. Use a leaf blower or broom to eliminate any debris from the membrane surface.

Review Mule-Hide specifications and details for complete installation information.

PRECAUTIONS

- Eye protection is recommended during installation
- Use care to avoid over-torquing the fastener
- Do not expose plates to UV for extended periods

PROTECTION & SAFETY

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.

ADDITIONAL INFORMATION

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at www.mulehide.com for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

DISCLAIMER

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate at the time of printing. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Since the manner of use is beyond our control, Mule-Hide does not authorize anyone to make any warranty of merchantability or fitness for any particular purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. Mule-Hide must be notified in writing of any claims and be given the opportunity to inspect the alleged failure before repairs are made.